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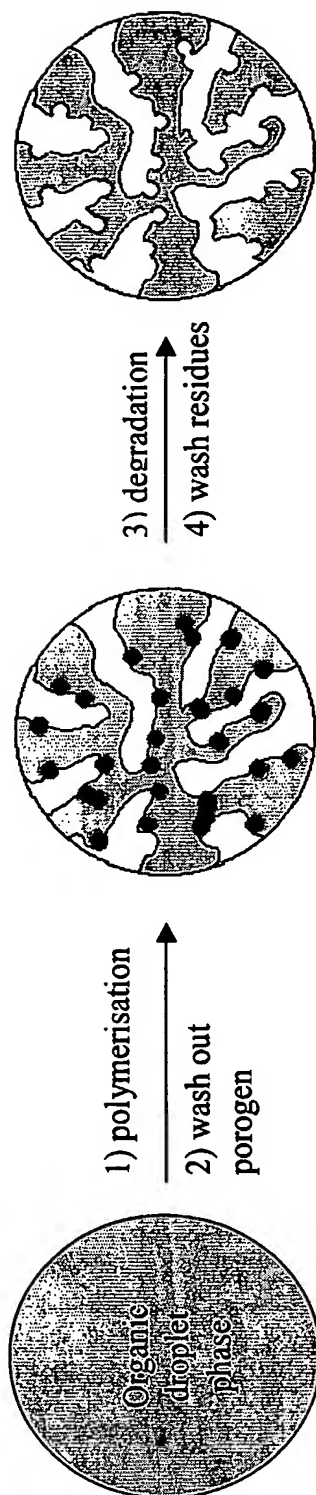


Figure 1.

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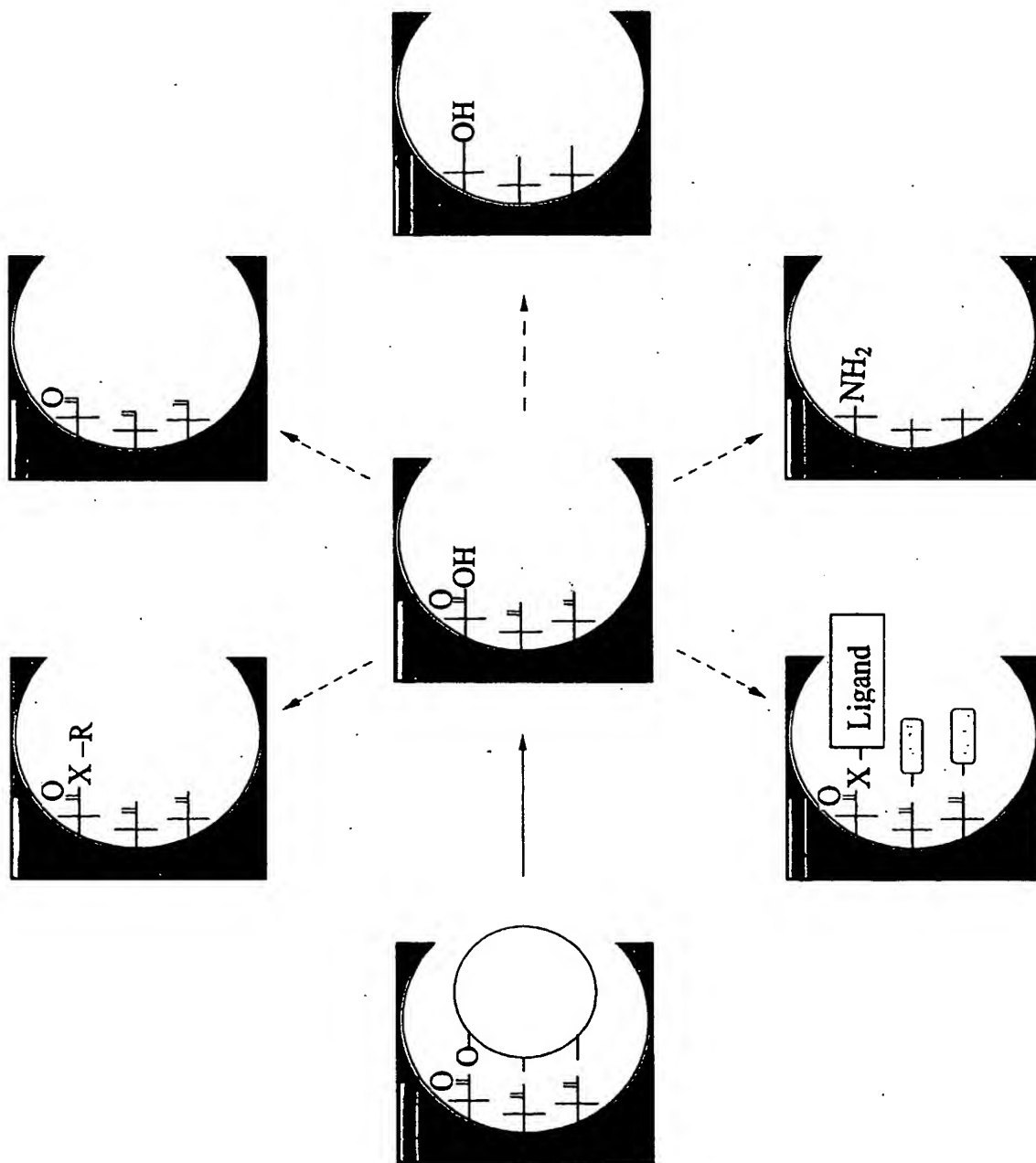


Figure 2.

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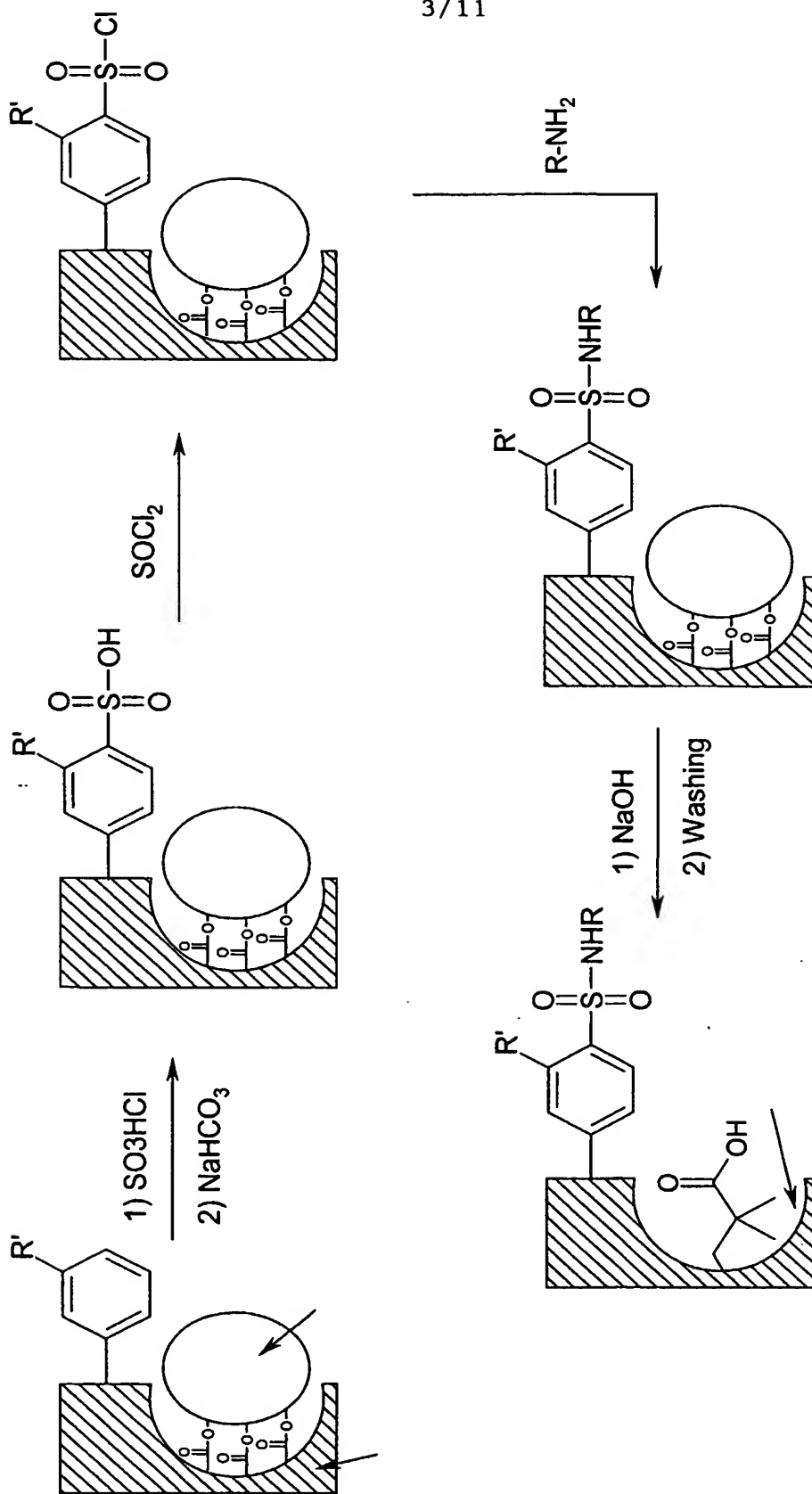


Figure 3.

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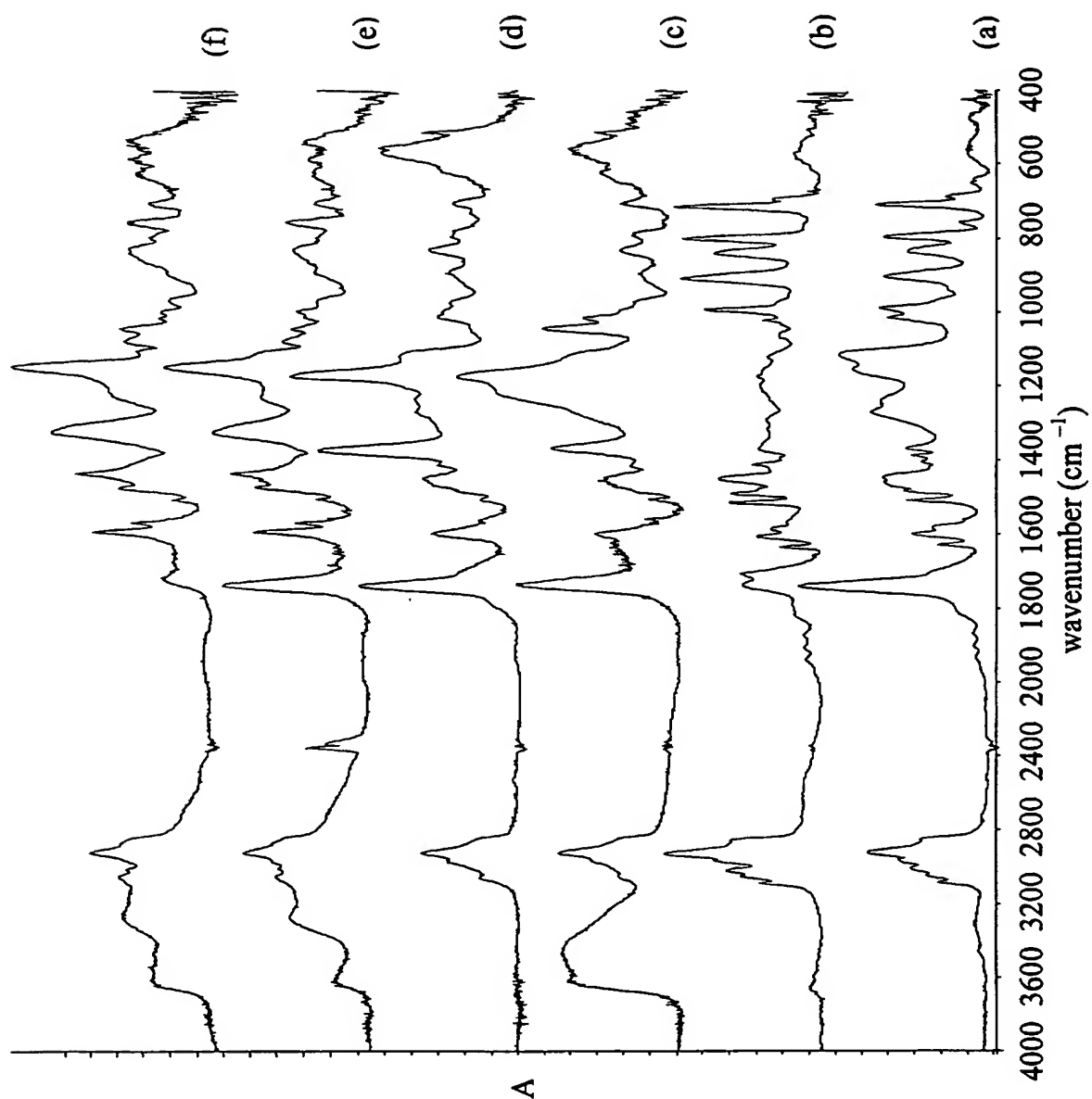


Figure 4.

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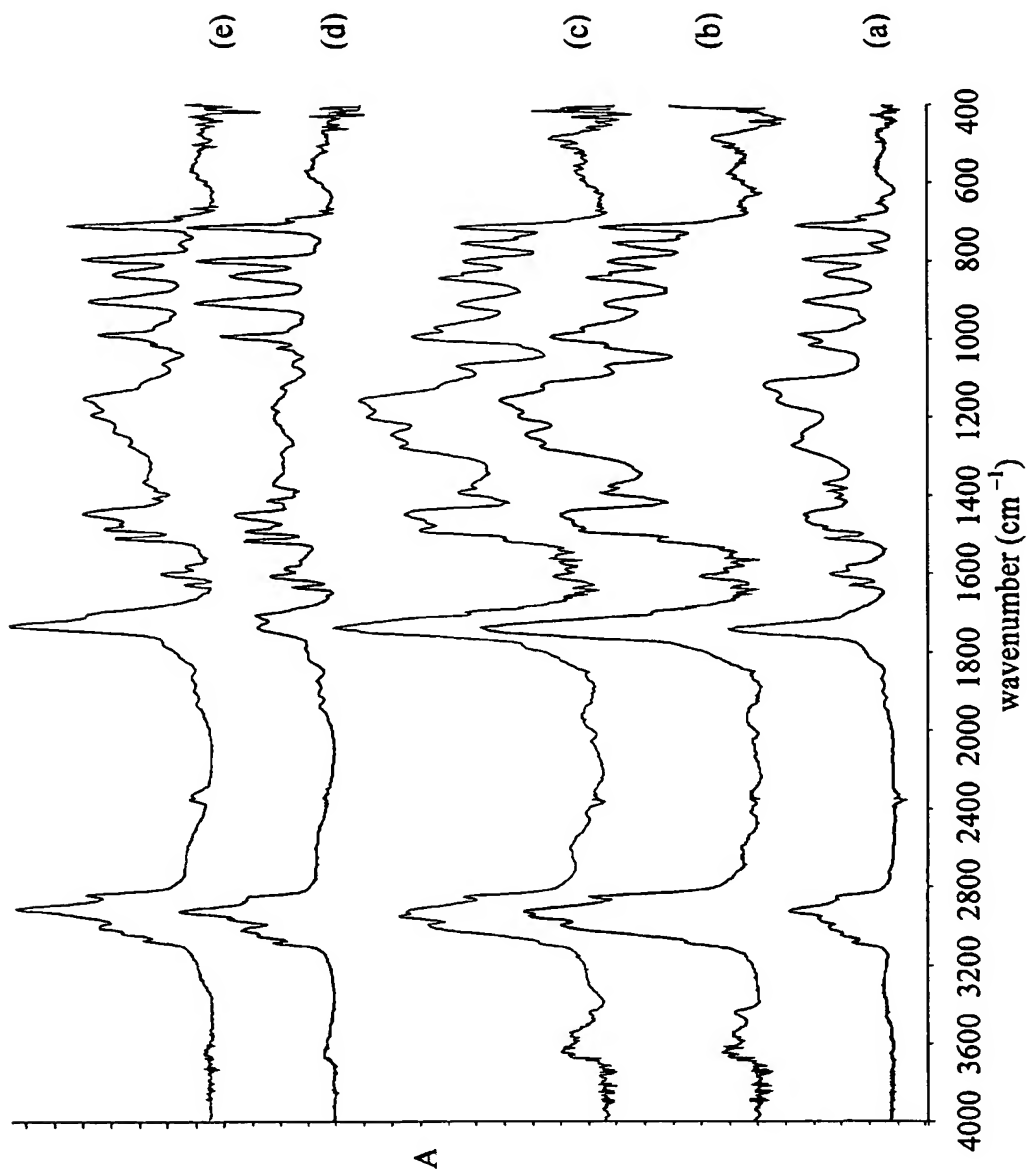
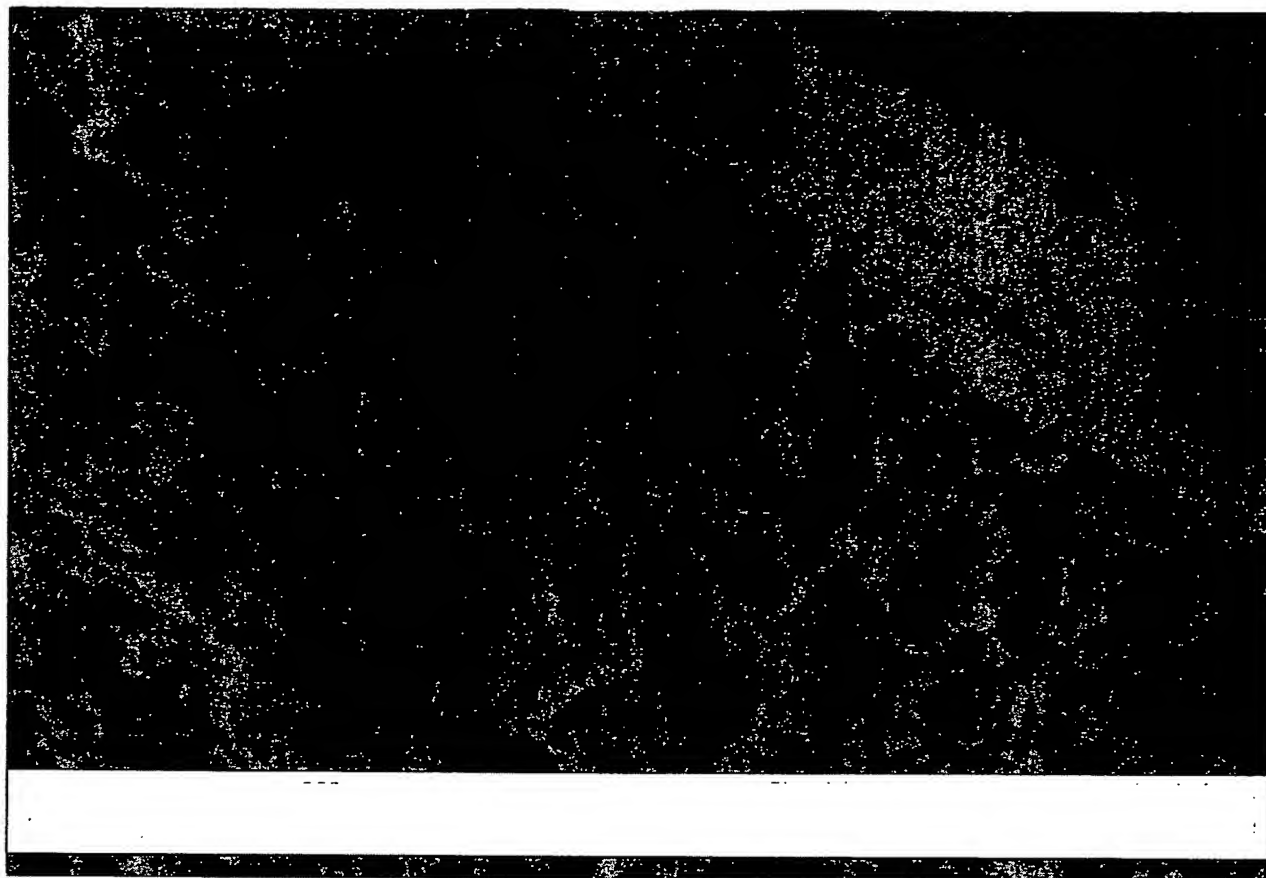


Figure 5.

**Figure 6**



**Figure 7.**

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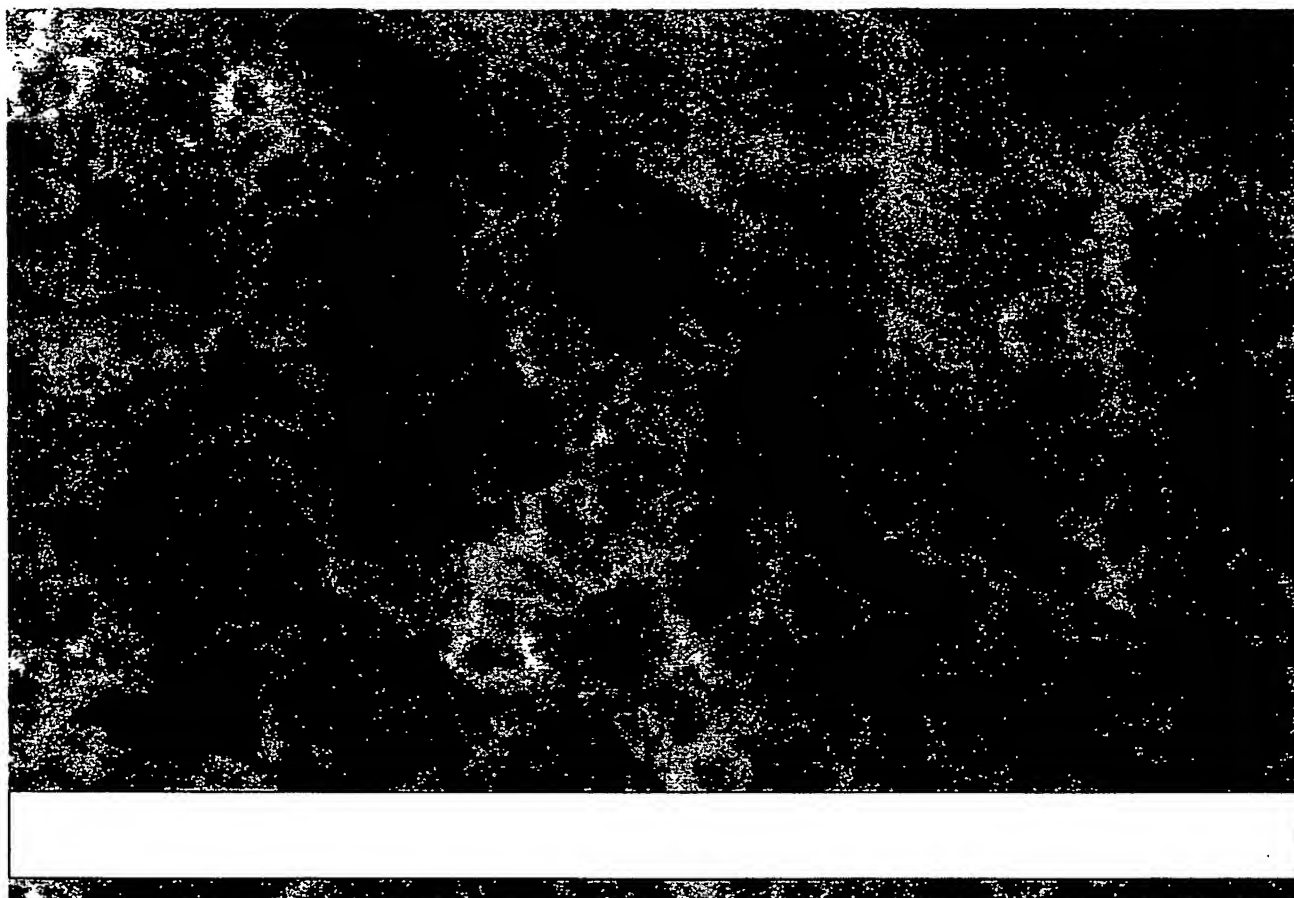
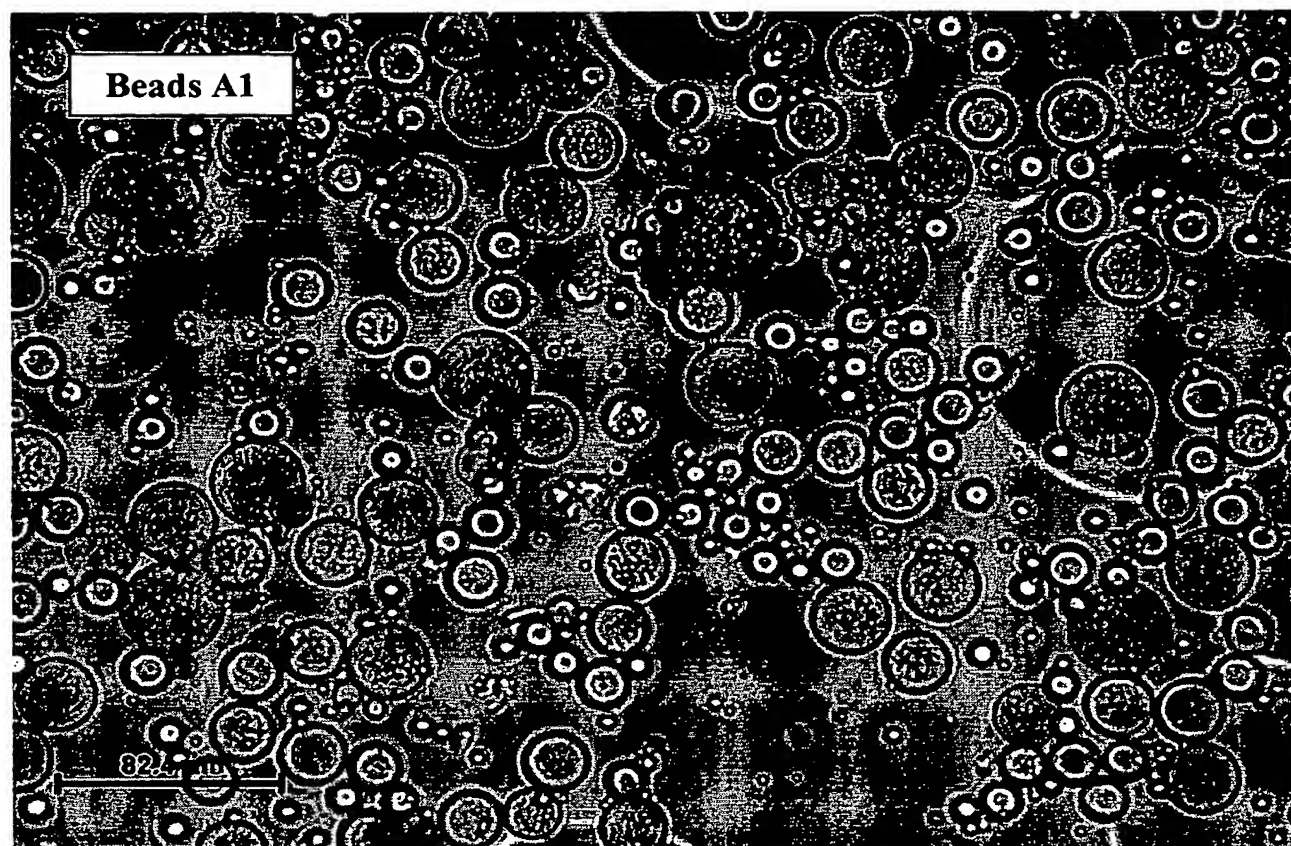


Figure 8

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**Figure 9.**

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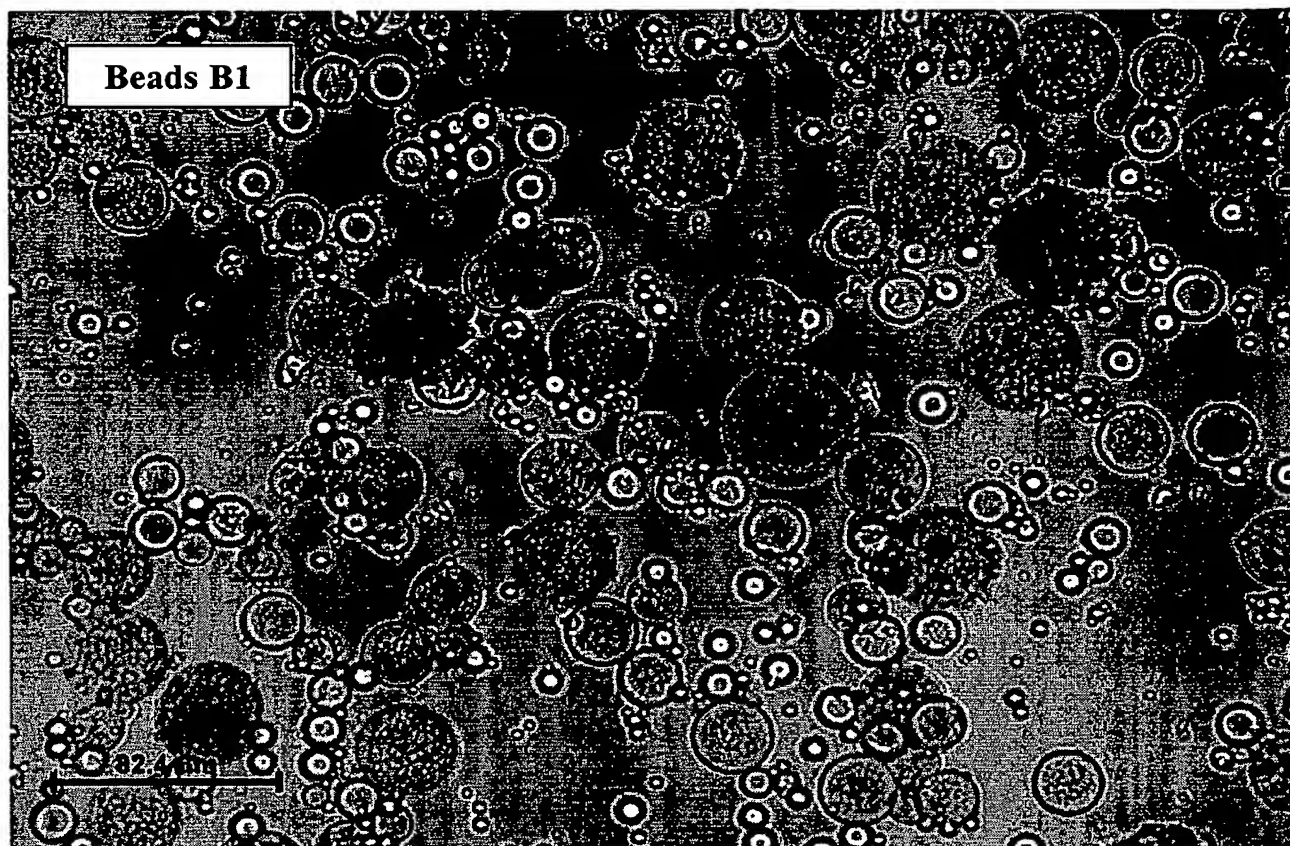


Figure 10.

Table 1: Polydivinylbenzene beads initiated by Boltorn®-BiB macroinitiators and mediated by CuCl/PMDETA

Beads	Boltorn®-BiB		DVB (g)	Porogen		Yield (%)	Before hydrolysis	
	Generati on	Mass (g)		Toluene (ml)	2-Ethyl- 1-hexanol (ml)		Surface area (m <sup>2</sup> g <sup>-1</sup> )	Adsorption pore volume (ml g <sup>-1</sup> )
A1 <sup>a</sup>	2 <sup>nd</sup>	0.33	0.60	0.33	0.66	86	134	0.3742
A2 <sup>b</sup>	2 <sup>nd</sup>	0.15	0.27	0.22	0.45	82	65	0.1872
A3 <sup>b</sup>	2 <sup>nd</sup>	0.30	0.27	0.30	0.30	79	1	0.0067
A4 <sup>c</sup>	3 <sup>rd</sup>	2.11	4.48	2.10	4.90	82	117	0.3354
A5 <sup>c</sup>	3 <sup>rd</sup>	1.53	3.26	1.99	4.64	81	73	0.1833
A6 <sup>d</sup>	4 <sup>th</sup>	0.17	0.37	0.17	0.40	94	64	0.1547
A7 <sup>e</sup>	4 <sup>th</sup>	0.75	1.60	0.97	2.27	91	140	0.3210

<sup>a</sup>Sealed test tube reactor, 12 ml; 9 ml Mowiol (5%), 0.03 ml HCl (37%), 0.18 ml PMDETA, 0.044 g CuCl<sup>b</sup>Sealed test tube reactor, 5 ml; 3 ml Mowiol (5%), 0.03 ml HCl (37%), 0.092 ml PMDETA, 0.022 g CuCl<sup>c</sup>Sealed test tube reactor, 50 ml; 36 ml Mowiol (5%), 0.21 ml HCl (37%), 1 ml PMDETA, 0.22 g CuCl<sup>d</sup>Sealed test tube reactor, 5 ml; 3 ml Mowiol (2%), 0.03 ml HCl (37%), 0.092 ml PMDETA, 0.022 g CuCl<sup>e</sup>Sealed test tube reactor, 25 ml; 16 ml Mowiol (2%), 0.13 ml HCl (37%), 0.46 ml PMDETA, 0.11 g CuCl

Figure 11.

Table 2: Hydrolytic degradation of the polyester portion of poly(Boltorn®-BiB-divinylbenzene) beads

Beads	Boltorn®-BiB		Wt% DVB	Amount of initiation sites in feed (mmol g <sup>-1</sup> )	After hydrolysis				
	Generati on	Wt%			% Retention of resin <sup>a</sup>	Carboxylic acid group capacity (mmol g <sup>-1</sup> ) <sup>b</sup>	Conversion of initiation sites <sup>c</sup>	Surface area (m <sup>2</sup> g <sup>-1</sup> )	Adsorption pore volume (ml g <sup>-1</sup> )
B1	2 <sup>nd</sup>	35.4	64.6	1.37	66.7	0.56	27	281	0.4955
B2	2 <sup>nd</sup>	35.4	64.6	1.37	69.8	1.35	69	142	N/A
B3	2 <sup>nd</sup>	52.2	47.8	2.02	57.4	0.80	23	90	0.0731
B4	3 <sup>rd</sup>	32.0	68.0	1.22	72.6	0.86	51	199	0.4943
B5	3 <sup>rd</sup>	31.9	68.1	1.22	80.6	0.84	56	245	0.2997
B6	4 <sup>th</sup>	31.9	68.1	1.21	71.4	0.78	46	171	0.3448
B7	4 <sup>th</sup>	31.9	68.1	1.21	79.1	0.56	36	291	0.4249

<sup>a</sup>Determined by gravimetry<sup>b</sup>Determined by titration<sup>c</sup>Calculated as, (carboxylic acid group capacity/ retention of resin)/ amount of initiation sites in feed

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